

Abstract Details

Title: A Study Carried Out for Observing Traffic Behaviour on Undisciplined Intersections/Junctions in Mixed Traffic Conditions

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Abstract: At present, traffic at most of the Major at grade intersection / junctions are controlled by traffic police with the help of signalled traffic lights. In the last few years, Gurgaon has witnessed sudden boom of population. With the growth of MNC and IT companies in large numbers, the city has experienced an unprecedented growth in population as well as traffic. The study has making focussed on traffic plying through HUDA City Centre. According to world resource Institute estimate, around 1.5 lac people use the Metro from HUDA City Centre Metro station each day, of which 30% users reach the station by car, 30% by Auto Rickshaws, and 30% by Buses. Apart from this, nearly two lakh vehicles cross the intersection every day to reach IFFCO Chowk, Signature Tower, Subhash Chowk, Sohna Road, Faridabad Road etc. Not just the vehicles but even the pedestrians hamper traffic movement. Due to Lack of space for horizontal growth of roads, it is essential to find ways and means to reduce frequent jams at this intersection. For the safety of pedestrians, proper footpath, Zebra crossing, Foot over bridge are required to be developed. Traffic needs to be diverted to alternate routes ahead and after the intersections. Some of the roads should be exclusively reserved for one way traffic between 8 A.M. to 9 P.M. For this purpose, it is necessary to conduct traffic survey to know the present volume of traffic category of vehicles and turning movements. A well designed roundabout achieves a balance of safety and efficiency. Traffic rotaries reduce the complexity of crossing traffic by forcing them into weaving operations. The shape and size of the rotary are determined by the traffic volume and share of turning movements. Capacity assessment of a rotary is done by analyzing the section having the greatest proportion of weaving traffic. In the past years various models have been developed for analyzing the traffic flow on this intersection. These methods are classified in two groups. The first group consists of methods which are purely empirical and based on geometry of intersection. The second group consists of methods which are based on Gap acceptance process.

Keywords: Traffic Behaviour, Undisciplined Intersections, Harder's Method.